

January 7, 2003

Re: Vesuvius USA 089-16134-00075

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
Administrator, Christine Todd Whitman
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNTVPMOD.wpd 8/21/02



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

January 7, 2003

Neal De Decker
Vesuvius USA
816 East Porter St,
Crown Point, IN 46307

Re: 089-16134-00075
Minor Permit Modification to:
Part 70 permit No.: T089-6882-00075

Dear Mr. De Decker:

Vesuvius USA was issued Part 70 operating permit T089-6882-00075 on February 12, 1999 for operation of a refractory manufacturing plant. A letter requesting changes to this permit was received on September 17, 2002. Pursuant to the provisions of 326 IAC 2-7-12 (b) (1) a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please contact Alic Bent, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, ext. 3206 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
AB/EVP

cc: File - Lake County
Air Compliance Section Inspector - Ramesh Tejuja
Compliance Data Section - Karen Nowak
Technical Support and Modeling - Michele Boner
Administrative and Development



Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
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(800) 451-6027
www.state.in.us/idem

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Vesuvius USA
816 East Porter Street
Crown Point, Indiana 46307

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-6882-00075	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Quality	Issuance Date: February 12, 1999 Expiration Date: February 12, 2004
First Administrative Amendment: 089-11412-00075	Issuance Date: December 20, 1999
First Significant Source Modification: 089-11254-00075	Issuance Date: January 19, 2000
First Significant Permit Modification: 089-15008-00075	Issuance Date: February 8, 2002
First Minor Permit Modification: 089-16134-00075	Pages Affected: 4, 5, 27 - 30
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 7, 2003

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary refractories manufacturing plant.

Responsible Official: Neal De Decker, Vice President of Manufacturing
Source Address: 816 East Porter St, Crown Point, IN 46307
Mailing Address: 816 East Porter St, Crown Point, IN 46307
SIC Code: 3255
County Location: Lake
County Status: Nonattainment area for Ozone
Attainment area for all other criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) natural gas-fired rotary drum dryer, identified as EU-001, with a maximum throughput of 3 tons of dried solids per hour, utilizing a baghouse (001) for particulate control, and exhausting through one (1) stack (S/V ID: 001);
- (2) one (1) bagging line, identified as EU-004, with a maximum throughput of 6.0 tons of solids or extruded refractory shapes per hour, consisting of four (4) batching hoppers, one (1) mixer/dryer, and one (1) hydraulic extruder and conveyor, all utilizing a baghouse (004) for particulate control, and exhausting through one (1) stack (S/V ID: 004);
- (3) one (1) anhydrous tap hole process, identified as EU-005, with a maximum throughput of 6.0 tons of extruded refractory shapes per hour, consisting of a scale, skip, two (2) mixers, and an extruder, all utilizing a baghouse (005) for particulate control, and exhausting through one (1) stack (S/V ID: 005);
- (4) one (1) ground material line, identified as EU-006, with a maximum throughput of 4 tons per hour of solid raw material or ground and screened material, consisting of a dump station, two (2) bucket elevators, four (4) storage silos which can be filled at a maximum rate of 15.0 tons per hour, a crusher, a dispensing hopper and one (1) auger, all utilizing a baghouse (006) for particulate control, and exhausting through one (1) stack (S/V ID: 006);
- (5) one (1) Eirich high intensity mixer, identified as EU-009, with a maximum throughput of 6.0 tons of dry material per hour, utilizing a baghouse (009) for particulate control, and exhausting inside the building;

- (6) one (1) tap hole production line #3, identified as EU-010, with a maximum throughput of 3.6 tons per hour, consisting of a Praschak pre-blend mixer, skip hoist, 3UD Simpson mixer, an extruder, and a discharge conveyor belt, all utilizing a baghouse (010) for particulate control, and exhausting through one (1) stack (S/V ID: 010); and
- (7) one (1) castable production line, identified as EU-011, with a maximum throughput of 7.5 tons per hour, consisting of a Praschak mixer, skip hoist, a discharge bin and a bag filler, all utilizing a baghouse (011) with after-filters (011A) for particulate control, and exhausting inside the building through one (1) stack (S/V ID: 011).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Safety-Kleen cold cleaner degreaser).
- (2) Other categories with emissions below insignificant thresholds:
 - (a) Four (4) 10,000 gallon tar storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC; and
 - (b) one (1) resin taphole process, identified as EU-002, emitting less than 25 lb/day of PM, 15 lb/day of VOC, and less than 1 ton of a single HAP per year, utilizing a baghouse (002) with a design grain loading of less 0.03 grains/acf and an air flow rate of 22,000 acfm, and exhausted through one (1) stack (S/V ID: 002);

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAQ within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision;
 - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

-
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ.

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;

- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]

- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
- (2) The Permittee, and IDEM, OAQ acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit PM10 is limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Emission Offset Minor Source Status [326 IAC 2-3]

The total source potential to emit VOC and NOx is less than 25 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) will not apply.

C.3 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9, or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor), in a six (6) hour period.

C.5 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.6 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.7 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.8 Fugitive Dust Emissions [326 IAC 6-1-11.1]

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%). Compliance with this opacity limit shall be achieved by controlling fugitive particulate matter emissions according to a fugitive dust control plan. The plan shall be submitted within six (6) months from the date of issue of this permit.

C.9 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.10 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.11 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.13 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.14 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.15 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.16 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.17 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
[326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

- Facility Description [326 IAC 2-7-5(15)] - Refractory Manufacturing Operations including the following:
- (1) One (1) natural gas-fired rotary drum dryer, identified as EU-001, with a maximum throughput of 3 tons of dried solids per hour, utilizing a baghouse (001) for particulate control, and exhausting through one (1) stack (S/V ID: 001);
 - (2) one (1) bagging line, identified as EU-004, with a maximum throughput of 6.0 tons of solids or extruded refractory shapes per hour, consisting of four (4) batching hoppers, one (1) mixer/dryer, and one (1) hydraulic extruder and conveyor, all utilizing a baghouse (004) for particulate control, and exhausting through one (1) stack (S/V ID: 004);
 - (3) one (1) anhydrous tap hole process, identified as EU-005, with a maximum throughput of 6.0 tons of extruded refractory shapes per hour, consisting of a scale, skip, two (2) mixers, and an extruder, all utilizing a baghouse (005) for particulate control, and exhausting through one (1) stack (S/V ID: 005);
 - (4) one (1) ground material line, identified as EU-006, with a maximum throughput of 4 tons per hour of solid raw material or ground and screened material, consisting of a dump station, two (2) bucket elevators, four (4) storage silos which can be filled at a maximum rate of 15.0 tons per hour, a crusher, a dispensing hopper and one (1) auger, all utilizing a baghouse (006) for particulate control, and exhausting through one (1) stack (S/V ID: 006);
 - (5) one (1) Eirich high intensity mixer, identified as EU-009, with a maximum throughput of 6.0 tons of dry material per hour, utilizing a baghouse (009) for particulate control, and exhausting inside the building;
 - (6) one (1) tap hole production line #3, identified as EU-010, with a maximum throughput of 3.6 tons per hour, consisting of a Praschak pre-blend mixer, skip hoist, 3UD Simpson mixer, an extruder, and a discharge conveyor belt, all utilizing a baghouse (010) for particulate control, and exhausting through one (1) stack (S/V ID: 010); and
 - (7) one (1) castable production line, identified as EU-011, with a maximum throughput of 7.5 tons per hour, consisting of a Praschak mixer, skip hoist, a discharge bin and a bag filler, all utilizing a baghouse (011) with after-filters (011A) for particulate control, and exhausting inside the building through one (1) stack (S/V ID: 011).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter emissions from the rotary dryer (001), bagger line (004), anhydrous taphole process (005) ground material line (006), Eirich high intensity mixer (009), tap hole line #3 (010) and castable line (011) shall each be limited to 0.03 grain per dry standard cubic foot.

D.1.2 Particulate Matter (PM) [326 IAC 6-1-11.1]

The facility identified as the ground material line (006) is subject to the following:

- (a) The PM₁₀ stack emissions shall not exceed 0.022 grains per dry standard cubic foot (dscf) and 10% opacity.

- (b) There shall be a zero percent frequency of visible emission observations from a building enclosing all or a part of the material processing equipment, except from a vent in the building;
- (c) The PM10 emissions from building vents shall not exceed 0.022 grains per dscf and 10% opacity.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each facility and its control device.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

- (a) During the period between 12 and 36 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner on the following units:
 - i. Rotary Dryer (S/V ID:001): PM testing to verify compliance with Condition D.1.1; and
 - ii. Gr. Material Line (S/V ID: 006): PM and PM10 testing to verify compliance with Conditions D.1.1 and D.1.2.
- (b) This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.1.5 Particulate Matter (PM)

The baghouse(s) (001, 004, 005, 006, 009, 010 and 011) for PM control shall be in operation at all times when each facility is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

- (a) Once per shift visible emission notations of the rotary dryer (001), bagger line (004), anhydrous taphole process (005), ground material line (006), Eirich high intensity mixer (009) and tap hole line #3 (010) stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. Operations may continue only if there are no visible emissions.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse(s) used in conjunction with the facilities listed below at least once per shift when the processes are in operation. When for any one reading, the pressure drop across each baghouse is outside the range specified below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports.

<u>Facility</u>	<u>Pressure Drop</u>
Rotary Dryer 001	1.0 - 6.0 inches of water
Bagger Line 004	3.5 - 11.0 inches of water
Anhydrous Taphole Process 005	2.0 - 7.5 inches of water
Ground Material Line 006	1.0 - 6.0 inches of water
Eirich High Intensity Mixer 009	1.5 - 6.0 inches of water
tap hole line #3 (010)	4.0 - 9.0 inches of water
castable line (011)	1.0 - 6.0 inches of water

- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the refractories manufacturing operations listed in this section. All defective bags shall be replaced.

D.1.9 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of once per shift visible emission notations of the rotary dryer (001), bagger line (004), anhydrous taphole process (005), ground material line (006), Eirich high intensity mixer (009) and tap hole line #3 (010) stack exhaust.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain once per shift records of the total static pressure drop during normal operation for each baghouse.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - The following specifically regulated insignificant activities:

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Safety-Kleen cold cleaner degreaser).
- (2) Other categories with emissions below insignificant thresholds:
 - (a) one (1) resin taphole process, identified as EU-002, emitting less than 25 lb/day of PM, 15 lb/day of VOC, and less than 1 ton of a single HAP per year, utilizing a baghouse (002) with a design grain loading of less 0.03 grains/acf and an air flow rate of 22,000 acfm, and exhausted through one (1) stack (S/V ID: 002);

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

The Safety-Kleen cold cleaner degreaser shall comply with the following operating and control requirements:

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.2.2 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the resin taphole process (002) shall be limited to 0.03 grain per dry standard cubic foot.

Compliance Determination Requirement

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Vesuvius USA
Source Address: 816 East Porter St., Crown Point, Indiana 46307
Mailing Address: 816 East Porter St., Crown Point, Indiana 46307
Part 70 Permit No.: T089-6882-00075

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Vesuvius USA
Source Address: 816 East Porter St., Crown Point, Indiana 46307
Mailing Address: 816 East Porter St., Crown Point, Indiana 46307
Part 70 Permit No.: T089-6882-00075

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)
C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Vesuvius USA
Source Address: 816 East Porter St., Crown Point, Indiana 46307
Mailing Address: 816 East Porter St., Crown Point, Indiana 46307
Part 70 Permit No.: T089-6882-00075

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification and Minor Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Vesuvius USA
Source Location:	816 East Porter St, Crown Point, IN 46307
County:	Lake
SIC Code:	3255
Operation Permit No.:	T089-6882-00075
Operation Permit Issuance Date:	February 12, 1999
Source Modification No.:	089-16122-00075
Permit Modification No.:	089-16134-00075
Permit Reviewer:	Alic Bent / EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Vesuvius USA which operates a refractory manufacturing plant, requesting the relocation of a dust collector to the roof of the existing building and addition of the following emission units and pollution control devices.

- (a) one (1) tap hole production line #3, identified as EU-010, with a maximum throughput of 3.6 tons per hour, consisting of a Praschak pre-blend mixer, skip hoist, 3UD Simpson mixer, an extruder, and a discharge conveyor belt, all utilizing a baghouse (010) for particulate control, and exhausting through one (1) stack (S/V ID: 010);
- (b) one (1) castable production line, identified as EU-011, with a maximum throughput of 7.5 tons per hour, consisting of a Praschak mixer, skip hoist, a discharge bin and a bag filler, all utilizing a baghouse (011) with after-filters (011A) for particulate control, and exhausting inside the building through one (1) stack (S/V ID: 011); and
- (c) two (2) above ground refined tar storage tanks, each with 10,000 gallon capacity.

Special Issue - Increased Utilization of Existing Processes

The construction and operation of the new taphole production line and the new castable production line are not for fulfilling a contract for new tar-bonded taphole products or castable mixes, nor for supplying larger existing markets. The taphole line is for "backup" to the existing taphole lines. This additional equipment will allow for better maintenance and repair scheduling of the existing equipment allowing production to continue while maintenance and repair projects are completed during regular business hours instead of after-hours and weekends. The castable line is a "stand alone" process that will use raw materials ready for use as delivered to the plant. The raw materials delivered to the plant are ground to the size specification for the castables products they are used in and the raw materials are already dried. No additional processing or handling is required beyond that which is given in the proposed modification: batching, mixing and bagging for shipment to customers. Therefore, IDEM has determined that the construction and operation of the new taphole production line and the new castable production line would not result in an increased utilization of the other existing refractory processes.

Existing Approvals

The source was issued Part 70 operating permit No. 089-6882-00075 on February 12, 1999. The source has since received the following approvals:

- (a) First Administrative Amendment No.: 089-11412, issued on December 20, 1999.
- (b) First Significant Source Modification No.: 089-11254, issued on January 19, 2000;
- (c) First Significant Permit Modification No.: 089-15008, issued on February 8, 2002.

The source has since been operating under these approvals.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
010	Tap Hole Line	32	no data	8,766	Ambient
011	Castable Line	18	no data	4,500	Ambient

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 17, 2002.

Emission Calculations

See Appendix A: pages 1 and 2 of this document for detailed emissions calculations

Potential To Emit of Modification Before Control/Limitation

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	88.33
PM-10	47.38
SO ₂	-
VOC	15.86
CO	-
NO _x	-

HAP's	Potential To Emit (tons/year)
Polycyclic Organic Matter	less than 10
Dibenzofuran	less than 10
Naphthalene	less than 10
Quinoline	less than 10
TOTAL	less than 25

Justification for the Modification

The Title V permit is being modified through a Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(5)(C), this is a minor source modification for which the potential to emit of PM and PM-10 is limited to less than twenty-five (25) tons per year by using a baghouse with better than 99% control efficiency. The Minor Source Modification will be incorporated into the permit through a Minor Permit Modification because new compliance monitoring conditions are required to be added to the existing title V permit.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	severe nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.
- (b) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
This type of operation is not one of the 28 listed source categories under 326 IAC 2-2; therefore, the fugitive PM emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	greater than 100, less than 250
PM-10	greater than 100, less than 250
SO ₂	less than 10
VOC	less than 10
CO	less than 10
NO _x	less than 10

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, no nonattainment pollutant is emitted at a rate of 25 tons per year or greater, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Part 70 permit (T089-6882-00075) issued on February 12, 1999.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
tap hole line #3 (010) ⁽¹⁾	0.40	0.22	-	15.86	-	-	negl.
castable line (011) ⁽¹⁾	0.48	0.26	-	-	-	-	negl.
Total Emissions	0.88	0.48	-	15.86	-	-	negl.
PSD/Emission Offset Significant Level	250	250	250	25	250	25	NA

(1) Based on controlled PM and PM-10 potential emissions.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD and 40 CFR 52.21, and Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, and 326 IAC 2-3, the PSD and Emission Offset requirements do not apply.

Federal Rule Applicability

- (a) This modification is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO, because this modification does not process any of the materials listed as "Non-Metallic Minerals". Therefore, this NSPS does not apply.
- (b) The two (2) 10,000 gallon tar storage tanks (see Insignificant Activities) are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because the tanks each have a storage capacity less than 40 cubic meters.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

There are no new State Rules applicable on a source-wide basis due to this First Minor Source Modification. All source-wide State Rules cited in Part 70 Operating Permit T089-6882-00075, issued on February 12, 1999, continue to apply to this source.

State Rule Applicability - Individual Facilities

There are no new State Rules applicable on an individual basis due to this First Minor Source Modification. All individual State Rules cited in Part 70 Operating Permit T089-6882-00075, issued on February 12, 1999, continue to apply to this source. The following State Rules cited in Part 70 Operating Permit T089-6882-00075, issued on February 12, 1999, also apply to the taphole production line #3 (EU-010) and the castable production line (EU-011):

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

This rule applies to sources or facilities located in specifically listed nonattainment counties and have the potential to emit one hundred (100) tons or more of particulate matter per year or have actual emissions of ten (10) tons or more of particulate matter per year. This source is located in Lake County, a specifically listed county, therefore, this rule applies. The particulate matter emissions from the taphole production line #3 (EU-010) and the castable production line (EU-011) are subject to the requirements of 326 IAC 6-1-2 (Particulate Emissions Limitations) since they emit nonfugitive particulate matter.

- (a) Pursuant to this rule, particulate matter emissions from the taphole production line #3 (EU-010) shall be limited to 0.03 gr/ dscf. This is equivalent to a particulate matter emission rate of 2.25 pounds per hour.
- (b) Pursuant to this rule, particulate matter emissions from the castable production line (EU-011) shall be limited to 0.03 gr/ dscf. This is equivalent to a particulate matter emission rate of 1.16 pounds per hour.

Pursuant to emissions calculations and information supplied by the applicant, these facilities are in compliance with this rule. The baghouses (010 and 011) shall be in operation at all times these processes are in operation to comply with this limit.

326 IAC 6-1-11.1 (Particulate Matter (PM))

The taphole production line #3 (EU-010) and the castable production line (EU-011) are not subject to 326 IAC 6-1-11.1(a)(1)(F). This rule applies to material processing facilities with capacities equal to or greater than a process weight rate of 10.0 tons per hour. The facilities identified as the tap hole line #3 (010) and the castable line (011) each process less than 10.0 tons per hour, therefore this rule does not apply.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The taphole production line #3 (EU-010) and the castable production line (EU-011) are not subject to the requirements of 326 IAC 6-3-2, since the applicable PM limits established by 326 IAC 6-1-2 are more stringent than the PM limits that would be established by 326 IAC 6-3-2. The more stringent limits apply and the limits pursuant to 326 IAC 6-3-2 do not apply.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. EU-010 and EU-011 have applicable compliance monitoring conditions as specified below:
 - (a) There are no visible emissions notations of the castable line (011) because the baghouse exhausts inside the building.

- (b) Once per shift visible emissions notations of EU-010 stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. Operations may continue only if there are no visible emissions. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (c) The Permittee shall record the total static pressure drop across the baghouses controlling EU-010 and EU-011, at least once per shift when the units are in operation. When for any one reading, the pressure drop across baghouses 010 and 011 are outside the normal range of 4.0 and 9.0 inches of water and 1.0 and 6.0 inches of water, respectively, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports.
- (d) An inspection shall be performed each calendar quarter of all bags controlling EU-010 and EU-011. All defective bags shall be replaced.
- (e) In the event that bag failure has been observed:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for the taphole production line #3 (EU-010) and the castable production line (EU-011) must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) and 326 IAC 2-7 (Part 70).

Proposed Changes to the Part 70 Operating Permit

The following changes are made as the First Minor Source Modification 089-16122 to Part 70 Operating Permit No. T089-6882-00075 (new language shown in bold and deleted language shown with a line through it):

1. Section A.1 has been revised to reflect the new responsible official.

A.1 General Information ~~[326 IAC 2-7-4(c)]~~ **[326 IAC 2-7-5(15)]**

The Permittee owns and operates a stationary refractories manufacturing plant.

Responsible Official: ~~Mr. Ronald Fricke~~ **Neal De decker, Vice President of Manufacturing**
Source Address: 816 East Porter St, Crown Point, IN 46307
Mailing Address: 816 East Porter St, Crown Point, IN 46307
SIC Code: 3255
County Location: Lake
County Status: Nonattainment area for Ozone
Attainment area for all other criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

2. Section A.2 has been revised to include the new equipment (EU-010 and EU-011).

A.2 Emission Units and Pollution Control Equipment Summary ~~[326 IAC 2-7-4(c)(3)]~~
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) natural gas-fired rotary drum dryer, identified as EU-001, with a maximum throughput of 3.0 tons of dried solids per hour, utilizing a baghouse (001) for particulate control, and exhausting through one (1) stack (S/V ID: 001);
- (2) one (1) bagging line, identified as EU-004, with a maximum throughput of 6.0 tons of solids or extruded refractory shapes per hour, consisting of four (4) batching hoppers one (1) mixer/dryer, one (1) hydraulic extruder and conveyor, all utilizing a baghouse (004) for particulate control, and exhausting through one (1) stack (S/V ID: 004);
- (3) one (1) anhydrous tap hole process, identified as EU-005, with a maximum throughput of 6.0 tons of extruded refractory shapes per hour, consisting of a scale, skip, two (2) mixers, and an extruder, all utilizing a baghouse (005) for particulate control, and exhausting through one (1) stack (S/V ID: 005);

- (4) one (1) ground material line, identified as EU-006, with a maximum throughput of 4.0 tons per hour of solid raw material or ground and screened material, consisting of a dump station, two (2) bucket elevators, four (4) storage silos which can be filled at a maximum rate of 15.0 tons per hour, a crusher, a dispensing hopper and one (1) auger, all utilizing a baghouse (006) for particulate control, and exhausting through one (1) stack (S/V ID: 006); **and**
- (5) one (1) Eirich high intensity mixer, identified as EU-009, with a maximum throughput of 6.0 tons of dry material per hour, utilizing a baghouse (009) for particulate control, and exhausting inside the building-;
- (6) **one (1) tap hole production line #3, identified as EU-010, with a maximum throughput of 3.6 tons per hour, consisting of a Praschak pre-blend mixer, skip hoist, 3UD Simpson mixer, an extruder, and a discharge conveyor belt, all utilizing a baghouse (010) for particulate control, and exhausting through one (1) stack (S/V ID: 010); and**
- (7) **one (1) castable production line, identified as EU-011, with a maximum throughput of 7.5 tons per hour, consisting of a Praschak mixer, skip hoist, a discharge bin and a bag filler, all utilizing a baghouse (011) with after-filters (011A) for particulate control, and exhausting inside the building through one (1) stack (S/V ID: 011).**

3. Section A.3 has been revised to include the two (2) 10,000 gallon tar storage tanks.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (Safety-Kleen cold cleaner degreaser).
- (2) Other categories with emissions below insignificant thresholds:
 - (a) **Four (4) ~~Two (2)~~** 10,000 gallon tar storage tanks emitting less than one (1) ton per year of a single HAP and less than fifteen (15) pounds per day of VOC; and
 - (b) one (1) resin taphole process, identified as EU-002, emitting less than 25 lb/day of PM, 15 lb/day of VOC, and less than 1 ton of a single HAP per year, utilizing a baghouse (002) with a design grain loading of less 0.03 grains/acf and an air flow rate of 22,000 acfm, and exhausted through one (1) stack (S/V ID: 002);

4. The equipment list for section D.1 has been revised to include the new equipment.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Refractory Manufacturing Operations including the following:

- (1) One (1) natural gas-fired rotary drum dryer, identified as EU-001, with a maximum throughput of 3.0 tons of dried solids per hour, utilizing a baghouse (001) for particulate control, and exhausting through one (1) stack (S/V ID: 001);
- (2) one (1) bagging line, identified as EU-004, with a maximum throughput of 6.0 tons of solids or extruded refractory shapes per hour, consisting of four (4) batching hoppers one (1) mixer/dryer, one (1) hydraulic extruder and conveyor, all utilizing a baghouse (004) for particulate control, and exhausting through one (1) stack (S/V ID: 004);
- (3) one (1) anhydrous tap hole process, identified as EU-005, with a maximum throughput of 6.0 tons of extruded refractory shapes per hour, consisting of a scale, skip, two (2) mixers, and an extruder, all utilizing a baghouse (005) for particulate control, and exhausting through one (1) stack (S/V ID: 005);
- (4) one (1) ground material line, identified as EU-006, with a maximum throughput of 4.0 tons per hour of solid raw material or ground and screened material, consisting of a dump station, two (2) bucket elevators, four (4) storage silos which can be filled at a maximum rate of 15.0 tons per hour, a crusher, a dispensing hopper and one (1) augur, all utilizing a baghouse (006) for particulate control, and exhausting through one (1) stack (S/V ID: 006); ~~and~~
- (5) one (1) Eirich high intensity mixer, identified as EU-009, with a maximum throughput of 6.0 tons of dry material per hour, utilizing a baghouse (009) for particulate control, and exhausting inside the building-;
- (6) **one (1) tap hole production line #3, identified as EU-010, with a maximum throughput of 3.6 tons per hour, consisting of a Praschak pre-blend mixer, skip hoist, 3UD Simpson mixer, an extruder, and a discharge conveyor belt, all utilizing a baghouse (010) for particulate control, and exhausting through one (1) stack (S/V ID: 010); and**
- (7) **one (1) castable production line, identified as EU-011, with a maximum throughput of 7.5 tons per hour, consisting of a Praschak mixer, skip hoist, a discharge bin and a bag filler, all utilizing a baghouse (011) with after-filters (011A) for particulate control, and exhausting inside the building through one (1) stack (S/V ID: 011).**

5. Conditions D.1.1 and D.1.5 have been revised to include the new units. Conditions D.1.6 - D.1.10 have been revised to incorporate the current permitting language and to include the new units.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter emissions from the rotary dryer (001), bagger line (004), anhydrous taphole process (005) ground material line (006), ~~and~~ Eirich high intensity mixer (009), **tap hole line #3 (010) and castable line (011)** shall each be limited to 0.03 grain per dry standard cubic foot.

Compliance Determination Requirements

D.1.5 Particulate Matter (PM)

The baghouse(s) (001, 004, 005, 006, 009, **010 and 011**) for PM control shall be in operation at all times when each facility is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

- (a) **Once per shift** ~~Daily~~ visible emission notations of the rotary dryer (001), bagger line (004), anhydrous taphole process (005), ground material line (006), ~~and~~ Eirich high intensity mixer (009) **and tap hole line #3 (010)** stack exhaust shall be performed during normal daylight operations ~~when exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal. **Operations may continue only if there are no visible emissions.**
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.7 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the baghouse(s) used in conjunction with the facilities listed below at least once **per shift daily** when the processes are in operation. ~~when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range specified below or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~ **When for any one reading, the pressure drop across each baghouse is outside the range specified below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports.**

Facility	Pressure Drop
Rotary Dryer 001	1.0 - 6.0 inches of water
Bagger Line 004	3.5 -11.0 inches of water
Anhydrous Taphole Process 005	2.0 - 7.5 inches of water
Ground Material Line 006	1.0 - 6.0 inches of water
Eirich High Intensity Mixer 009	1.5 - 6.0 inches of water

tap hole line #3 (010)
castable line (011)

4.0 - 9.0 inches of water
1.0 - 6.0 inches of water

- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the refractories manufacturing operations listed in this section ~~when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.~~ All defective bags shall be replaced.

D.1.9 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) **For multi-compartment units,** ~~the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions).~~ Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~ **Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of ~~daily~~ **once per shift** visible emission notations of the rotary dryer (001), bagger line (004), anhydrous taphole process (005), ground material line (006), ~~and~~ Eirich high intensity mixer (009) **and tap hole line #3 (010) stack exhaust.**
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain ~~the following:~~ **once per shift records of the total static pressure drop during normal operation for each baghouse.**

- ~~(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:~~
 - ~~(A) Inlet and outlet differential static pressure; and~~
 - ~~(B) Cleaning cycle: frequency and differential pressure~~
- ~~(2) Documentation of all response steps implemented, per event.~~
- ~~(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.~~
- ~~(4) Quality Assurance/Quality Control (QA/QC) procedures.~~
- ~~(5) Operator standard operating procedures (SOP).~~
- ~~(6) Manufacturer's specifications or its equivalent.~~
- ~~(7) Equipment "troubleshooting" contingency plan.~~
- ~~(8) Documentation of the dates vents are redirected.~~
- (c) To document compliance with Condition D1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 ~~and the dates the vents are redirected.~~
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Conclusion

This modification shall be subject to the conditions of the attached proposed Minor Source Modification No. 089-16122-00075.

Appendix A: Process Particulate Emissions

Company Name: Vesuvius USA
Address City IN Zip: 816 East Porter St., Crown Point, IN 46307
MPM: 089-16134-00075
Reviewer: AB/EVP
Date: October 10, 2002

Emission Calculation								
Process	Process Weight (tons/hr)	PM Emission Factor* (lbs/ton)	PM-10 Emission Factor* (lbs/ton)	Potential PM Emissions (tons/yr)	Potential PM-10 Emissions (tons/yr)	Control Efficiency	Potential PM Emissions (tons/yr) Controlled	Potential PM10 Emissions (tons/yr) Controlled
Taphole Production Line #3 (EU010)	3.60	2.6	1.4	40.37	21.76	99.00%	0.40	0.22
Castable Production Line (EU011)	7.50	1.5	0.8	47.96	25.62	99.00%	0.48	0.26
Total Emissions Based on Rated Capacity at 8,760 Hours/Year				88.33	47.38		0.88	0.47

Potential Emissions (tons/year)								
Compliance Calculation								
Process	No. of Units	acfm	Gas Temp F	Potential PM Emissions (tons/yr) Controlled	Potential PM10 Emissions (tons/yr) Controlled	grains/dscf	Allowable PM Emissions (lb/hr) (326 IAC 6-1-2)	Allowable PM Emissions (tons/yr) (326 IAC 6-1-2)
Taphole Production Line #3 (EU010)	1	8,766	68	0.40	0.22	0.0013	2.25	9.87
Castable Production Line (EU011)	1	4,500	68	0.48	0.26	0.0036	1.16	5.07

* Emission factors for EU: 010 and 011 are based on material balance studies performed by the applicant.

Compliance with 326 IAC 6-1-2

The following calculations determine compliance with 326 IAC 6-1-2 (for counties listed in 326 IAC 6-1-7) to 0.03 grains/dscf of outlet air. A sample calculation is given below of unit EU010:

$$\frac{0.40 \text{ ton/yr}^*}{525,600 \text{ min/yr}^*} \times \frac{2000 \text{ lb/ton}^*}{8,766 \text{ dscf/min}} \times \frac{7000 \text{ gr/lb}}{1} = 0.001 \text{ gr/dscf} \quad (\text{will comply})$$

Appendix A: VOC emissions

Company Name: Vesuvius USA
Address City IN Zip: 816 East Porter St., Crown Point, IN 46307
MPM: 089-16134-00075
Reviewer: AB/EVP
Date: October 10, 2002

Emission Calculation			
Process	Process Weight (tons/hr)	VOC Emission Factor* (lbs/ton)	Potential VOC Emissions (tons/yr)
Taphole Line #3 (EU010)	3.60	refined tar: 0.006	0.09
Taphole Line #3 (EU010 1A)	3.60	solvent: 1.000	15.77

Total Emissions Based on Rated Capacity at 8,760 Hours/Year **15.86**

* Emission factor for refined tar calculated using engineering formulas derived from manufacturer's data, process data and TANKS 4.0 software.
Emission factor for the solvent assumed 100% vaporization.